



## A World Rainforest Report Educational Supplement:

### ***For Students and Teachers***

# Solutions to the Problem of Rainforest Destruction

***“If there is to be even a small chance to relax the pressures on tropical biota, fundamental changes in the world trade system and the basic relationships between rich and poor nations must take place”***

**— Paul and Anne Ehrlich 1988**

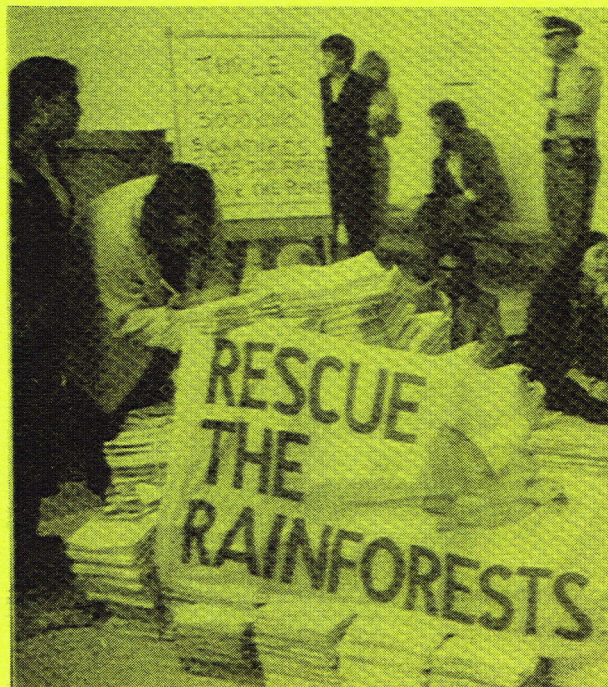
This paper examines the conventional solutions offered by governments and development agencies, and then outlines some of the principles on which most NGOs believe lasting solutions will have to be based.

As the World Rainforest Movement points out, the issue of rainforest destruction is “now recognised as one of the greatest environmental threats -- and tragedies -- of all time” (World Rainforest Movement 1992). Rainforests provide services such as climate stabilisation, soil generation, regulation of water cycles and they are home for most of the species on earth (including millions of forest peoples). The loss of most of the world's rainforests would have incalculable repercussions. The world's rainforests are currently being destroyed at the devastating rate of a hectare a second (Collins *et al*, 1992), with over half already gone and a rate of reafforestation 10-20 times slower (Washington, 1991).

In order to determine the solutions to the problem, it is first necessary to identify the causes. Because there is disagreement about the causes, there is disagreement about what the solutions are.

The conventional approaches used by governments, development organisations and aid agencies are based on the assumption that deforestation is caused by poverty and overpopulation. Poor people who have little option but to clear the forests in order

to survive are turned into culprits when in actual fact they are the victims of social injustice. Development is seen as the solution by these bodies, but many non-government organisations (NGOs) maintain that development is the basic cause, rather than the cure. (See *Education Supplement on the Causes of Rainforest Destruction*).



# Conventional Solutions

*A number of measures aimed at solving the problem of tropical deforestation have been introduced by governments and international development and aid organisations. Often, they are based on the assumption that poverty is a basic cause of deforestation. Because they see development as the antidote to poverty, they also see it as the solution to the problem of deforestation. However, development as it is usually promoted seldom helps the people who need it most, and in many cases actually accelerates deforestation.*

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## The Tropical Forest Action Plan

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The Tropical Forest Action Plan (TFAP) launched in 1985, was a major international attempt to tackle deforestation. The Plan has made billions of dollars available for projects which are intended to save forests.

However there are problems with the Plan :

- \* It operates on the assumption that the way to save forests is to give them an economic value and thereby provide a motive for saving them. By promoting the tropical timber industry, it attempts to do this. However, this approach has failed repeatedly. The World Bank estimates that of the thirty three countries now exporting tropical timber, all but ten will be net timber importers by the year 2000 (WRM, 1990).

- \* It ignores the main immediate causes of tropical deforestation and blames the victims. It focuses on overpopulation and poverty as the basic causes but does not address the central role of developed countries and the fundamental problem of landlessness.

- \* There was no grassroots consultation and limited NGO participation. As a result the needs of forests peoples were ignored.

Since the introduction of the TFAP, tropical deforestation has accelerated alarmingly. Not only has the TFAP failed to decrease deforestation; it has contributed to an increase in the rate of destruction by promoting industrial logging in many tropical countries..

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## Sustained Yield Forestry

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This ill-defined term is used extensively with reference to tropical forests, but basically describes a myth. There are next to no examples of sustainable, industrial tropical timber operations in the world, even when using a limited economic definition of



sustained yield - ie., maintaining the volumes of timber available in successive harvests (WRM, 1990). A study commissioned by the International Tropical Timber Organisation (ITTO), the organisation responsible for regulating the international tropical timber trade, found that the amount of sustainable tropical timber harvesting is "on a world scale, negligible". The more holistic ecological concept of sustainability, which refers to the continual maintenance of the whole ecosystem is even less likely to be attained. The absence of any evidence that sustainable tropical timber extraction can be achieved is ignored by governments and industry who promote 'sustained yield' as a solution, without definitions or examples. Many factors stand in the way of true sustainability including corruption, commercial pressures and the methods of extraction (ie heavy machinery).

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## Reserve Strategies

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A significant proportion of tropical biodiversity would already be lost if nature reserves, often initiated by private conservation organisations, had not been established. However, all too often, indigenous peoples living in harmony with their environment, have been expelled from protected areas or subjected to controls that have led to the disintegration of their cultures. It is incorrect to believe that nature reserves can conserve the greater proportion of the genetic diversity of tropical rainforests, where the number of individuals of each species tends to be low, but the total number of species tends to be enormous. This feature of rainforest species makes it inevitable that large-scale projects will cause the extinction of large numbers of species. Only by providing the widest possible protection for the remaining primary rainforests will it be possible to protect the greater part of the earth's remaining biodiversity. Nature reserves can only be a supportive measure in a much wider strategy.

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## The International Biodiversity Program

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The World Bank is pursuing the goal of a global "Biodiversity Action Programme". Like the TFAP, this plan fails to confront the underlying causes of biodiversity loss, and is likely to worsen the problem it is supposed to solve. According to the World Rainforest Movement, the Programme has the following four basic defects:

1. It fails to tackle the processes that are causing biodiversity loss: development policies which replace of traditional species-rich agriculture and forest practices with large-scale monocultures. Under the Biodiversity Programme, monocultures would be encouraged.

2. The Programme sees the setting aside of reserves as the solution. Reserves are a useful tool under some circumstances but as the sole means of conserving biodiversity, they are hopelessly inadequate. It is not known how big reserves need to be in order to ensure their long-term survival. Also, the creation of reserves can be used as an excuse for exploiting unprotected areas.

3. Under the Plan, Biodiversity is valued in monetary terms. There is no recognition of the value

of biodiversity for its own sake. In the long term, this will not work. Biodiversity can be conserved only through changed values which result in principles of conservation being part and parcel of the production process.

4. The International Biodiversity Programme could increase the shift of genetic resources from the poorer South where most of the world's species are found, to the developed North via large organisations such as the International Bureau for Plant Genetic Resources (which is supported by the World Bank). Related to this is the granting of industrial patents to genetic components, with no recognition to the people from the third world countries where the genes were taken from. This also raises ethical questions about giving economic values to life forms.



# Towards Realistic Solutions

*The question of how to confront tropical deforestation is complex and daunting. It involves challenging some of the most basic values of the industrialised nations and the decision makers in tropical countries.*

*However, the importance of the issue cannot be overstated.*

*What we attempt to do here is to outline some of the principles upon which realistic solutions must be based.*

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## Addressing the Problem of Landlessness

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Poor farmers opening up rainforest land for subsistence farming are the agents of more rainforest loss than any other single factor. Unless land reforms are enacted in the near future, most tropical forests will perish. According to the World Rainforest Movement's Marcus Colchester, they will have to be "agrarian reforms based on indigenous and peasant initiatives" (Colchester and Lohmann 1995 p.329).

Industrialised countries can help ease the pressures which result in skewed land distribution in the third world by reducing their demand for cash crops grown in the tropics and by ceasing to give financial aid to destructive and debt-inducing development

projects.

The logging industry also contributes to the problem of land clearance by poor farmers because the roads constructed by logging companies are the usual way that these farmers gain access to the forests.

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## 2. Recognising the Rights of Indigenous Peoples

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It is significant that the most promising initiatives to preserve rainforests have been carried out in cooperation with indigenous people who are the rightful owners of the forests. In 1990, the Colombian Government gave back half of its Amazonian territory to its rightful indigenous owners, acknowledging that they were the best guardians of the forest. In



Papua New Guinea and Ecuador, the Rainforest Information Centre and other organisations have been involved in schemes which support the legitimate development aspirations of traditional landowners in small scale projects which are under the control of the landowners themselves.

The logging industry, large dam projects, the mining industry and other development projects have ignored the rights and even the existence of indigenous people. Any realistic solution to the problem of rainforest loss must acknowledge the rights of indigenous people to their land.



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### Poverty, Debt and Inequality

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More than \$US1300 billion is owed by the third world to rich countries (World Bank, 1988) and poor nations are paying rich nations \$50 billion a year more than they are receiving in aid (Washington, 1991). Most of the countries with large debts are also the countries with comparably large areas of rainforest left. To repay the huge amounts owed, these countries have to sacrifice the environment (as well as health and education). A spiral of poverty-induced ecological degradation occurs as can be seen below.

It is clear then that without the cancellation of much of the third world's debt to the industrialised countries, tropical deforestation is bound to continue. All international debt entered into before 1980 for the 40 or so nations in trouble could be cancelled immediately and the rest phased out over the next ten years. A banking crisis would be unlikely to occur as the banks have been suspecting the debts won't be paid for long enough to make adjustments. With the need to repay loans removed, third world countries would be under less pressure to earn foreign ex-

change by selling tropical timber and cash crops grown on cleared rainforest land.

There needs to be greater equality of land, resources and income within nations as well (otherwise the spiral above will follow the same course of destruction with 'rich elite' in the first position rather than 'national debt'). For this to happen in third world countries, grassroots movements fighting for agrarian reform must be successful.

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### Ending Overconsumption

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The current global economy is based on the desire for continual, unlimited growth. This means using more and more resources, encouraging overconsumption and waste. This is in direct conflict with conservation and is based on the false assumption that the earth's resources are infinite. It also requires that the rich minority of the world's population use resources which belong to the world's poor, and this can only be done through the exploitation of third world countries.

Long term security for the world's tropical forests can only be achieved if the waste and injustice of the present global economic system is ended. Much theoretical work has been done on this issue (see, for example Daly, 1973, *Toward a Steady State Economy* and Ted Trainer, 1989, *Transition to a Conserver Society*). What is needed for these theories to be applied is a widespread change in values.

There is plenty of scope for reducing the consumption of wood products in industrialised countries. A reduction in the demand for wood products is likely to mean less demand for tropical timber and therefore less pressure on tropical forests. In the USA, the Rainforest Action Network is part of a campaign to reduce wood consumption by 75%. Far more paper is used than is needed, and a far greater proportion could be recycled. There is strong evidence that non-timber sources of paper such as hemp, kenaf and agricultural waste are viable options. In Japan, tropical timber is used for formwork on new buildings and discarded after one or two uses.

## Other issues that need to be addressed

### Population:

Although the role of overpopulation in the destruction of tropical forest has been misrepresented, there can be no lasting solutions to this or any other global environmental disaster until the problem of overpopulation is successfully confronted. Solving the problem of overpopulation will involve: more widespread acceptance of the importance of replacement reproduction (no more than two children per couple), equality for women, education, particularly for women and cheap and available contraception.



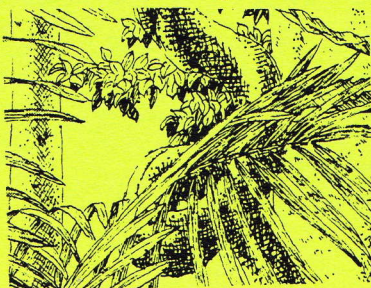
### Education and Research:

Education and research play a big role in halting the destruction of our forests. There is a need for more research into identifying species (before they become extinct) and other services forests provide apart from timber such as medicinal drugs, biological control of pests and diseases, dust removal from air, soil generation and climate stabilisation. These services need to be recognised. Education regarding social values is also needed. An improved education system where people learn to think for themselves and recognise themselves as part of nature is important as it is because of values of conformity, greed and dominion that we have got to where we are.



### Returning Power to Local Communities:

Ecological degradation is characteristically linked to the disempowerment of local communities. Control over land use is taken from the people who live on the land in question and given to centralised governments and multinationals. This means that control is no longer in the hands of those who have a vested interest in maintaining the land. Rather, it is in the hands of those who gain from its exploitation. This process needs to be reversed and power given back to local communities.



### Reducing Overconsumption and Waste

The global emphasis on high consumption and economic growth contributes indirectly to the problem of rainforest destruction in ways which have already been discussed.

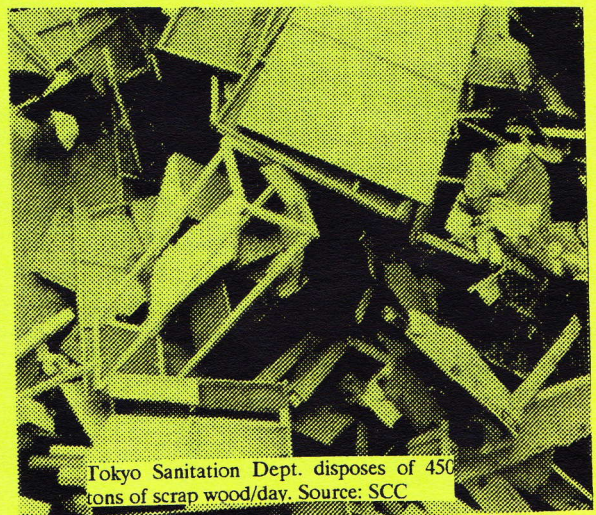
In addition, the waste and unnecessary use of timber products contributes more directly to tropical deforestation. The Rainforest Action Network in the United States is involved in a campaign to reduce wood consumption in the US by 75%. Far more paper than necessary is consumed in industrialised countries. Much more can be recycled. Non-tree sources for pulp, such as hemp, kenaf and agricultural waste could be utilised. Plantations on already degraded land could be encouraged. By reducing the demand for wood products in general, it is possible to reduce the demand for tropical timber. This will in turn reduce the pressure on tropical forests.



### Ending the Use of Tropical Timber

In Japan, the world's largest consumer of tropical timber, the wood is used for formwork and discarded after one or two uses. Tropical timber is used in many other ways, and in all cases, there are suitable alternatives available. In Australia and other rich countries, rainforest groups provide information on the environmental impact of using tropical timber, and on how these timbers can be avoided. In New South Wales, the Rainforest Information Centre publishes the NSW Good Wood Guide and similar books are published in other states.

If consumer demand dropped off to a level that the international trade in tropical timber ceased to be viable, one of the main causes of tropical deforestation and degradation would be gone.



# The World Rainforest Movement's Emergency Call to Action

## For the Forests and Their Peoples

*In 1989, a petition with three million signatures was presented to the United Nations Secretary General, Javier Perez, de Cuellar at the UN Headquarters in New York calling for immediate and drastic steps to be taken to stop global deforestation. The "Emergency Call to Action" was drawn up by the World Rainforest Movement, a global network of rainforest organisations. Unfortunately, there was no response from the UN, but the 'Emergency Call' remains a clear analysis of why the world's forests, both tropical and temperate, are disappearing, and what can be done about it.*

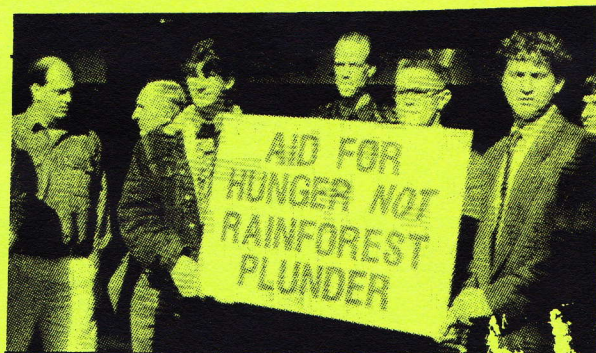
The *Emergency Call to Action* calls upon the United Nations (UN) and national governments make the preservation of the earth's remaining forests an absolute priority, and to "subordinate political and economic considerations" to this goal. It demands justice for indigenous peoples, peasants and local communities, asserting that the survival of the forests is dependent on their survival. In addition it calls for the world's rich nations and individuals to "restrain the overconsumption and wastage of resources" so that sustainable livelihoods can become available to all people.

The document then calls for ten specific courses of action:

**1. Forest Peoples:** Empowerment of forest peoples and those who depend on the forests through: recognising their land rights; allowing them a "decisive voice" in government of their areas; and ending policies which assume the cultural superiority of non-forest peoples.

**2. Destructive Projects:** An end to "practices and projects which would contribute either directly or indirectly to further forest loss". Among these it includes: plantation schemes, dams, ranching, mining and industrial projects, commercial logging, the Tropical Forest Action Plan and the UN Biodiversity Programme.

**3. Development Aid:** Drastic revision of the policies of the funding agencies which currently finance the practices and projects which are causing deforestation, so that funding is given instead to projects which protect or regenerate forests. It specifically mentions the following aid agencies as being in need of reform: the World Bank, the Asian Development Bank, the UN Food and Agriculture Organisation, the UN Development Programme, the overseas aid agencies of the developed countries, and major international corporations.



**4. Regenerating Degraded Forest Lands and Re-invigorating Local Cultures** in a programme under the direction of forest peoples.

**5. Curbing Waste and Overconsumption of Timber Products**

**6. The Tropical Timber Trade:** Ending all imports of tropical timber and tropical wood products from natural forests.

**7. Beef Consumption:** Taking immediate steps to cut down on the consumption of imported beef from tropical forests.

**8. Pollution:** Immediate steps to reduce atmospheric air pollution through better technology and changes in patterns of consumption and production.

**9. Restructuring the World Economic System** which currently dominated by the developed countries for their own benefit. The developed countries consume a disproportionate share of the world's natural resources.

**10. Sustainable Livelihoods:** Initiating a global shift towards developing sustainable livelihoods through reducing the scale at which production is carried out, maximising local self-sufficiency, subordinating economic activities to social and ecological ends.

## Recommended Reading

Colchester and Lohmann, 1993, *The Struggle for Land and the Fate of the Forests*, Zed Books, London.

Collins, Sayer and Whitmore (Editors), 1992, *The Conservation Atlas of Tropical Forests: Asia*, Macmillan, London.

Myers, N., 1992, *The Primary Source: Tropical Forests and our Future (Updated for the Nineties)*, Norton, New York.

World Rainforest Movement, 1990, *Rainforest Destruction- Causes, Effects and False Solutions*, World Rainforest Movement, Penang.

Rainforest Information Centre, 1991, *The Australian Rainforest Memorandum*, Rainforest Information Centre, Lismore.

Washington, Haydn, 1991, *Ecosolutions: Environmental Solutions for the World and Australia*, Boobook Publications, Marrickville.

Daly, Herman (ed), 1973, *Toward a Steady State Economy*, Freeman and Co.

Trainer, Ted, 1989, *Transition to a Conserver Society*, Dept. of Education, UNSW.



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